

CLAIMS

What is claimed is:

Claim 1. A mobile services network for management of service components in an electronic device, the mobile services network comprising:

a plurality of regions of data and content in the electronic device;

a plurality of server-side components, each of the server-side components managing at least one particular region of the plurality of regions of data and content in the electronic device.

Claim 2. The mobile services network according to claim 1, wherein the plurality of server-side components further comprise:

a plurality of repositories providing data and content for the electronic device, each of the plurality of repositories being capable of managing at least one region of data and content in the electronic device.

Claim 3. The mobile services network according to claim 1, wherein each of the plurality of regions of data and content in the electronic device are adapted to employ a security mechanism enabling a particular one of the plurality of server-side components to access or manage a particular one of the plurality of regions of data and content.

Claim 4. The mobile services network according to claim 1, wherein the plurality of regions of data and content in the electronic device comprise:

a corporation related data and content region being managed by a corporate server-side component;

an end-user related data and content region being managed by an end-user related server-side component;

an operator related data and content region being managed by an operator related server-side component; and

a manufacturer related data and content region being managed by a manufacturer related server-side component.

Claim 5. The mobile services network according to claim 1, further comprising:

a management server for managing the electronic device, wherein the plurality of server-side components manage the plurality of regions of data and content in the electronic device via the management server.

Claim 6. The mobile services network according to claim 5, wherein each of the plurality of server-side components are adapted to manage creating, updating, deleting, and configuring at least a corresponding one of the plurality of regions of data and content.

Claim 7. The mobile services network according to claim 6, wherein each of the plurality of server-side components is associated with a corresponding region of the plurality of regions of data and content and each of the plurality of server-side components is further adapted to manipulate and manage the corresponding region.

Claim 8. The mobile services network according to claim 7, wherein the plurality of regions of data and content further comprise:

a firmware region managed by a management server which is managed by a wireless operator;

an operating system region managed by the wireless operator;

a corporate logos region managed by a corporate user access management server;

a corporate confidential data and software region managed by the corporate user access management server; and

a user data region managed by the end-user.

Claim 9. The mobile services network according to claim 8, wherein each of the plurality of regions of data and content comprise at least one update agent associated therewith for updating data and content, and wherein the at least one update agent is adapted to add, delete, configure, update, and manage associated regions of the plurality of regions of data and content.

Claim 10. The mobile services network according to claim 1, wherein the electronic device comprises one of a mobile cellular phone handset, personal digital assistant, pager, MP3 player, and a digital camera.

Claim 11. A mobile services network comprising an electronic device having access to a plurality of services, and wherein the electronic device being adapted to be managed remotely, the mobile services network comprising:

- a management server for managing access to a plurality of services associated with the electronic device; and

- a plurality of service management repositories for management of associated service components installed in non volatile memory of the electronic device.

Claim 12. The mobile services network according to claim 11, wherein the associated service components comprise:

- at least one firmware and operating system layer;

- a communication stack;

- corporate data; and

- end-user personal data, wherein each of the associated service components employ a corresponding security service available in the electronic device.

Claim 13. The mobile services network according to claim 12, wherein the plurality of service management repositories further comprise:

- a corporate management server and repository for managing corporate data in the electronic device;

- an operator management server and repository for managing the communication stack in the electronic device;

- a manufacturer management server and repository for managing the at least one firmware and operating system layer in the electronic device; and

- an end-user management server and repository for managing end-user personal data in the electronic device.

Claim 14. The mobile services network according to claim 11, wherein the electronic device comprises one of a mobile cellular phone handset, personal digital assistant, pager, MP3 player, and a digital camera.

Claim 15. A mobile network capable of updating firmware and software in an electronic device, the mobile network comprising:

- a management server facilitating management of firmware and software in the electronic device;

- a corporate virtual user group management server for corporate user virtual group management; and

- a corporate software repository being employed for corporate user virtual group management and for distributing corporate software and corporate data to the electronic device.

Claim 16. The mobile network according to claim 15, further comprising a digital rights management server for disseminating rights to use corporate software and corporate data disseminated by the corporate virtual user group management server.

Claim 17. The mobile network according to claim 16, wherein the electronic device further comprises:

- non-volatile memory; and

- a corporate data segment for storing and managing corporate software and corporate data in non-volatile memory, wherein management of the corporate data segment being conducted solely by the corporate virtual user group management server.

Claim 18. The mobile network according to claim 16, further comprising:

- the corporate software repository being employed to update corporate software and corporate data in the corporate data segment in non-volatile memory of the electronic device; and

- an update package repository being employed to retrieve update packages for updating firmware and software in the electronic device.

Claim 19. The mobile network according to claim 18, wherein software in the electronic device comprises:

- an operating system; and
- a plurality of applications updateable by the management server.

Claim 20. The mobile network according to claim 15, wherein the electronic device comprises one of mobile cellular phone handset, personal digital assistant, pager, MP3 player, and a digital camera.

Claim 21. A method of managing a corporate data segment in an electronic device, the method comprising:

- retrieving corporate software and corporate data from a corporate data repository and facilitating retrieval via a corporate virtual user group management server;

- storing retrieved corporate software and corporate data in a corporate data segment of the electronic device;

- retrieving rights to access or execute corporate software and corporate data from a digital rights management server; and

- updating the corporate data segment.

Claim 22. The method according to claim 21, further comprising:

- incorporating verification information in corporate software and corporate data retrieved from the corporate data repository; and

- updating the corporate data segment in the electronic device only after verification of the verification information.

Claim 23. The method according to claim 22, further comprising:

- incorporating end-user authentication information in corporate software and corporate data during retrieval from the corporate data repository.

Claim 24. The method according to claim 21, wherein the electronic device comprises one of mobile cellular phone handset, personal digital assistant, pager, MP3 player, and a digital camera.

Claim 25. A mobile services network capable of managing firmware and software in an electronic device, the mobile services network comprising:

a plurality of management servers for managing different logical segments of non-volatile memory of the electronic device; and

the electronic device comprising non-volatile memory being logically segmented into a plurality of segments with a different one of the plurality of management servers associated with each of the plurality of segments.

Claim 26. The mobile services network according to claim 25, wherein the plurality of management servers employing digital rights management for security and for authorizing access to an associated one of the plurality of logical segments in the electronic device.

Claim 27. The mobile services network according to claim 26, wherein the plurality of segments comprise a corporate data and software segment being associated with a corporate data management server being one of the plurality of management servers.

Claim 28. The mobile services network according to claim 27, wherein the electronic device comprises a corporate data and software segment, and the electronic device being associated with a corporate user membership for an employee of a corporation, wherein the corporate data management server being adapted to erase at least a portion of the corporate data and software segment on the electronic device when the employee of the corporation associated with the electronic device severs an employment relationship.

Claim 29. The mobile services network according to claim 27, wherein the electronic device comprises a corporate data and software segment, and the electronic device being associated with a corporate user membership for an employee of a corporation, the corporate data management server being adapted to disable the electronic device when the employee of the corporation associated with the electronic device severs an employment relationship.

Claim 30. The mobile services network according to claim 27, wherein the electronic device comprises a corporate data and software segment, and the electronic device being associated with a corporate user membership for an employee of a corporation, wherein the corporate data management server is adapted to disable access to the corporate data and software segment of the electronic device to prevent unauthorized access to the corporate data segment in the electronic device.

Claim 31. The mobile services network according to claim 27, wherein the electronic device is associated with end-user membership in a user group, and the electronic device comprises an end-user data and software segment, the end-user data and software segment comprising:

- a plurality of gaming software and address book data; and

- an end-user data and software management server, the end-user data and software management server facilitating management of the end-user data and software segment;

- facilitating membership to the user group, and

- authorizing access to the end-user data and software segment by at least one of a plurality of management servers.

Claim 32. The mobile services network according to claim 25, wherein the electronic device comprises one of mobile cellular phone handset, personal digital assistant, pager, MP3 player, and a digital camera.